

Section 1 Identification

Product Name: Viper Series Welding Tip
Part Numbers: 71-1009, 71-1010, 71-1011, 71-1012, AC-1009, AC-1010, AC-1011, AC-1012
Recommended Use: Welding Tip
Manufacturer: Camarc LLC, 39048 Webb Drive, Westland, M, 48185, USA
General Information: office@camarcwelding.us
Emergency: 313 727 5020

Section 2 Hazard(s) Identification

During normal operation and usage, this non-combustible, non-reactive, solid material article does not present inhalation, ingestion, or chemical hazards. Welding Tips that this SDS concerns will require periodic maintenance or replacement, during which exposure to adhered hazardous contamination is possible. When this article is machined or otherwise modified by the user, dusts or fumes may be created, which may be potentially hazardous.

Section 3 Composition / Information on Ingredients

Grade C101 Oxygen Free Copper: Copper, Cu > = 99.99%

| Exposure Limit | |
|----------------|-------------------------|
| ACGIH TWA | 1mg/m3 (dust and mists) |
| ACGIH TWA | 0.2 mg/m3 (fume) |
| OSHA PEL TWA | 1mg/m3 (dust and mists) |
| OSHA PEL TWA | 0.1 mg/m3 (fume) |

Section 4 First Aid Measures

Show this SDS to those administering medical attention or treatment.

Inhalation: If breathing has stopped, perform artificial respiration and obtain medical aid immediately. If breathing is difficult, provide fresh air and seek medical attention as soon as possible.

Skin: Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Wash the skin using soap or mild detergent and water. Get medical attention if irritation develops and persists.

Eyes: Eye injuries from solid particles should receive immediate medical attention. Dust may be flushed from eyes immediately with large amounts of water, lifting the lower and upper lids occasionally; seek medical attention.

Ingestion: If the product or dust is swallowed, seek immediate medical attention or advice. Do not induce vomiting

Section 5 Fire-Fighting Measures

Suitable Extinguishing Media:

This solid material is noncombustible. Use extinguishing media appropriate to the surrounding fire.

Special Fire Fighting Procedures:

Not applicable

Unusual Fire and Explosion Hazard:

A fire or explosion hazard is not likely but, is possible if dusts generated by grinding are present in certain combinations of particle size, dispersion, concentration, and strong ignition source.

Hazardous Combustion Products:

Temperatures above the melting point may release alloy elements and metal oxides.

Special Protective Equipment and Precautions for Fire-Fighters:

For a dust fire confined to a small area, use a respirator approved for toxic dusts and fumes. Do not use water to extinguish fires around operations involving molten metal due to the potential for steam explosions.

Section 6 Accidental Release Measures

Clean-Up Procedures:

Product in solid form may be picked up by hand or other means to be placed into a container. When cleaning dust, use methods that minimize the dispersion of dust such as a high efficiency particulate air (HEPA) vacuum, wet dust mop, or wet clean-up. Put recovered material in a suitable, covered, and labeled container.

Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to Section 8.

Environmental Precautions:

Refer to Section 12.

Section 7 Handling and Storage

Safe Handling Procedures:

No special safety precautions required for handling prior to installation. Installation and removal of the product may cause exposure to dusts and other materials or chemicals associated with the installation (work) environment. Operations such as grinding, cutting, burning, and welding may generate dusts or fumes which may require special handling procedures.

Hygienic Practices:

Wash hands thoroughly after handling, and before eating or smoking. Smoking and consumption of food or beverages should be restricted from areas where hazardous dust or chemical may be present. Do not shake clothing, rags, or other items to remove dust. Dust should be removed by laundering or vacuuming (with appropriate filters) the clothing, rags, or other items.

Conditions for Safe Storage:

Maintain good housekeeping to prevent accidental exposure to substances that could impair the quality of the product.

Section 8 Exposure Control and Personal Protection**Control parameters:**

Refer to table in Section 3 for occupational exposure limit values.

Appropriate Engineering Controls:

When machining, heating or melting, use adequate local (preferably) or general exhaust ventilation to ensure that concentrations of dusts or fumes do not exceed exposure limits. Keep workplace clean and dry (unless wet machining is being used to capture dust and fume). Train personnel to minimize exposure to hazards during installation and replacement of product. On a regular basis, verify condition and proper function of equipment in which the product will be installed.

Individual Protection Measures:

Use appropriate gloves to protect against physical hazards. Always wear safety glasses with side shields and appropriate hearing protection when grinding or cutting. Use an approved respirator, with the proper assigned protection factor, whenever airborne concentrations of hazardous components exceed exposure limits listed in Section 3. Workers should wash before meals and leaving work.

Section 9 Physical and Chemical Properties

| | |
|------------------------------------|---|
| Appearance: | Machined Metallic solid with a Copper Color |
| Odor: | None |
| Melting point: | ~1,083 °C (1,981 °F) |
| Flash Point: | Not Available |
| Boiling point and range: | ~ 2,595 °C (4,703 °F) |
| Evaporation Rate: | Not Volatile |
| Flammability: | Not Flammable |
| Vapor Density: | Not Volatile |
| Density / Specific Gravity: | 8.94 |
| Vapor Pressure: | 1mm Hg at 1628°C, 20mm Hg @ 1970°C |
| Solubility In Water: | Insoluble |

(Note – These are typical values and not an exact Specification).

Section 10 Stability and Reactivity

Reactivity:

Copper may react with acetylene gas to form copper acetylides, which are sensitive to shock. Copper may react with strong acids to generate explosive gas (e.g., hydrogen).

Chemical Stability:

Stable under normal use conditions

Possibility of hazardous reactions:

May react with strong acids. Contact of dust with strong oxidizers may cause fire or explosion.

Conditions to avoid:

Temperatures > 500 C (930 F), which may soften the copper alloy.

Incompatible materials:

Dust is explosively incompatible with sodium azide.

Hazardous decomposition products:

The melting of this product may release alloy elements and metal oxides

Section 11 Toxicology Information

Symptoms related to the physical, chemical and toxicological characteristics.

Under normal handling and use, exposure to product presents few health hazards. Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. Higher dust exposures may cause difficulty breathing, congestion, and chest tightness.

Delayed and immediate effects and also chronic effects from short and long term exposure

Possible effects by route of exposure:

Inhalation: Breathing metal dust may worsen symptoms of individuals with pre-existing chronic respiratory disease. Follow exposure guidelines for copper dust and fume. Acute exposure to dust or fume may cause upper respiratory tract irritation, metallic taste in mouth, nausea, fatigue, and/or metal fume fever. Breathing copper dust may worsen symptoms of individuals with pre-existing chronic respiratory disease.

Skin Contact: Copper can cause some irritation with possible discoloration of skin.

Skin Absorption:

Metal dust exposure in hot, humid atmospheres may cause skin irritation. Allergic contact dermatitis is rarely encountered.

Eye Contact: If present as dust, copper may cause irritation, discoloration, and damage. As a foreign body in the lens, copper dust may cause a dense cataract and discolor the lens.

Ingestion: Ingestion of significant amounts of welding Tips is unlikely. If copper is swallowed and person is conscious, give large quantities of water to drink. Get medical attention as soon as possible. Serious effects may occur if large amounts of dust are swallowed.

Section 12 Ecological Information**Numerical Measures of Toxicity**

| | |
|------------------------|---------------|
| Toxicology Test | |
| LD / LC | LD50 |
| Test Type: | Acute |
| Test Route | Intraertoneal |
| Test Species | Mouse |
| Results Amount | 3.5mg / kg |

Copper Alloys are relatively insoluble in water and therefore have a low bioavailability. Product is not expected to present an environmental hazard. Dusts and fumes should not be released into the environment.

Section 13 Disposal Considerations

Used Product should be treated as scrap copper whenever possible and may be treated as General Industrial Waste is permitted by Federal, State and Local Disposal Regulations.

Section 14 Transportation Information

UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group number: Not applicable
Environmental hazards: Not applicable
IMDG Code: Not applicable
Transport in bulk: Not applicable
Special precautions: No special requirements are necessary in transporting this product

Section 15 Regulatory Information

This product is not classified as a health or environmental hazard under current legislation. No obligation exists to issue a safety data sheet according to REACH Art. 31.

Hazardous Material Identification System

| | |
|------------------------------------|---|
| Health Hazard | 0 |
| Flammability Hazard | 0 |
| Reactivity Hazard | 0 |
| Maximum Personal Protection | A |

Section 16 Other Information

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